

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 12/02/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,200	02/07/2002	Jesus Fernandez-Grandizo Martinez	KOB-9	3519
26689	7590 12/02/2004		EXAMINER	
WILDMAN, HARROLD, ALLEN & DIXON			NGUYEN, HANH N	
225 WEST WA	ACKER DRIVE		ART UNIT PAPER NUMBER	
cincrico, ii	2 00000		2834	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/072,200	FERNANDEZ-GRANDIZO MARTINEZ, JESUS				
Onice A	Action Summary	Examiner	Art Unit	~			
		Nguyen N Hanh	2834	lδ			
The MAILIN Period for Reply	IG DATE of this communication app	ears on the cover sheet with the c	orrespondence addr	ess			
THE MAILING DA  - Extensions of time may after SIX (6) MONTHS  - If the period for reply sp - If NO period for reply is - Failure to reply within the Any reply received by the	TATUTORY PERIOD FOR REPLY TE OF THIS COMMUNICATION.  To be available under the provisions of 37 CFR 1.13 from the mailing date of this communication. Described above is less than thirty (30) days, a reply specified above, the maximum statutory period we ne set or extended period for reply will, by statute, the Office later than three months after the mailing ustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this common (35 U.S.C. § 133).	nunication.			
Status							
1) Responsive	to communication(s) filed on 30 Au	ugust 2004.	·				
2a)⊠ This action i	``` <del></del> `` <del></del>	action is non-final.					
3) Since this ar	•		secution as to the m	nerits is			
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits i closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	S						
4a) Of the ab 5) ☐ Claim(s) 6) ☑ Claim(s) <u>1-3</u> 7) ☐ Claim(s)	34-39,41,42 and 44-67 is/are pendove claim(s) 57-67 is/are withdraw is/are allowed. 34-39,41,42 and 44-56 is/are rejection is/are objected to. are subject to restriction and/or	n from consideration.					
Application Papers							
10)⊠ The drawing( Applicant may Replacement	tion is objected to by the Examiner (s) filed on 15 April 2004 is/are: a) of the correction of the Examine of the correction of the Examine o	☑ accepted or b)☐ objected to the drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR				
Priority under 35 U.S	.C. § 119						
a) All b) S  1. Certific  2. Certific  3. Copies  applica	nent is made of a claim for foreign Some * c) None of: ed copies of the priority documents ed copies of the priority documents s of the certified copies of the prior ation from the International Bureau ned detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National St	age			
Attachment(s)				,			
	n's Patent Drawing Review (PTO-948) e Statement(s) (PTO-1449 or PTO/SB/08)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te	52)			

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

### **DETAILED ACTION**

### Remarks

1. In view of amendments, the Examiner withdraws the objection to the specification. The cancellation of claim 43 has been acknowledged.

## Election/Restrictions

- 2. Newly submitted claims 57-67 are directed to an invention that is independent or distinct from the invention originally claimed. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 57-67 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. The inventions are independent or distinct for the following reasons:
  - I. Claims 1-3, 34-39, 41, 42, 44-56 drawn to the motor mounting platform, classified in class 310, subclass 239.
  - Claims 57-64 drawn to the motor mounting support, classified in class
     310, subclass 239.
  - III. Claims 65-67 drawn to the motor mounting support, classified in class 310, subclass 239.
- 3. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP §

,

Application/Control Number: 10/072,200

Art Unit: 2834

806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group I) does not require the at least two pair of brush holder guides mounted directly mounting platform in which each pair receivably engages the brush holder and is adapted to permit the brush holder to be removed from the motor mounting platform. The subcombination (group II) has separate utility (the subcombination can be used in a motor mounting platform without requiring the motor mounting platform is not in electrical contact with any current carrying component when the motor is attached to the at least one motor support).

Page 3

4. Inventions I and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (group I) does not require at least one motor support integrally molded with the motor mounting platform. The subcombination (group III) has separate utility (the subcombination can be used in a motor mounting platform without requiring the motor mounting platform is not in electrical contact with any current carrying component when the motor is attached to the at least one motor support).

## Claim Rejections - 35 USC § 102

Page 4

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3, 44 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Cousins et al.

Regarding claim 1, Cousins et al. disclose a motor mounting platform for use in an appliance comprising: the motor mounting platform (38 in Fig. 2 and 3) constructed of a first material (polyburtylene tetraphalate) and at least two brush holders constructed of a second material (phenolic) being engaged to the platform (Col. 5, lines 42-47 and 62-68); and at least one motor support (casing 14) mounted to the motor mounting platform; wherein the motor mounting platform is not in electrical contact with any current carrying component when the motor is attached to the at least one motor support

Regarding claim 2, Cousins et al. also disclose a motor mounting platform wherein the second material (phenolic) is electrically non-conductive.

Regarding claim 3, Cousins et al. also disclose a motor mounting platform wherein the first material has a lower thermal classification than the second material (because phenolic is a kind of resin has a higher thermal classification than plastic).

Regarding claim 44, Cousins et al. also disclose a motor mounting platform further comprising at least two pair of brush holder guides (42 and 44) mounted directly

to the motor mounting platform in which each pair receivably engages one of the brush holders and is adapted to permit the brush holder to be removed from the motor mounting platform.

Regarding claim 56, Cousins et al, also disclose a motor mounting platform wherein a wire guide (tab 70) is connected to the motor mounting platform.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 34-39, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cousins et al. in view of Kasper et al.

Regarding claim 34, Cousins et al. show all limitations of the claimed invention except showing a motor mounting platform wherein the platform has a first side and a second side in which the second side includes a cavity surrounded by a wall.

However, Kasper et al. disclose a motor mounting platform (22 in Fig. 1) wherein the platform has a first side and a second side in which the second side includes a cavity surrounded by a wall for the purpose of forming a vacuum cleaner.

Since Cousins et al. and Kasper et al. are in the same field of endeavor, the purpose disclosed by Kasper et al. would have been recognized in the pertinent art of Cousins et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. by forming the platform has a first side and a second side in which the second side includes a cavity surrounded by a wall as taught by Kasper et al. for the purpose of forming a vacuum cleaner.

Regarding claim 35, Kasper et al. also disclose a motor mounting platform wherein at least one motor support is mounted on the first side.

Regarding claim 36, Kasper et al. also disclose a motor mounting platform wherein the brush holder is mounted on the first side

Regarding claim 37, Cousins et al. Kasper et al. also disclose the claimed invention except for showing the cavity has an involute shape. It would have been an obvious matter of design choice to form the cavity with an involute shape, since such modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Regarding claim 38, Kasper et al. also disclose a motor mounting platform wherein an exhaust outlet (chamber 74 in Fig. 1) extends from the mounting platform.

Regarding claim 39, Kasper et al. also disclose a motor mounting platform wherein the exhaust outlet is integrally molded with the motor mounting platform.

Regarding claim 41, Kasper et al. also disclose a motor mounting platform wherein the motor support includes a first post and a second post (Fig. 1).

Regarding claim 42, Kasper et al. also disclose a motor mounting platform wherein the first and second post are mounted on opposing sides of a hole defined in and extending through the motor mounting platform (Fig. 1).

7. Claims 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cousins et al. in view of Morimoto et al (U.S Patent No. 6,005,323).

Regarding claim 45, Cousins et al. show all limitations of the claimed invention except showing a motor mounting platform wherein each pair of brush holder guides comprises a pair of inverted L-shaped guides, each L-shaped guide opposing the other.

However, Morimoto et al. disclose a brush card (5 in Fig. 2) wherein the each pair of brush holder guides comprises a pair of inverted L-shaped guides (10 in Fig. 6), each L-shaped guide opposing the other for the purpose of guiding the brush holder.

Since Cousins et al. and Morimoto et al. are in the same field of endeavor, the purpose disclosed by Morimoto et al. would have been recognized in the pertinent art of Cousins et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. by forming the platform wherein each pair of brush holder guides comprises pair of inverted L-shaped guides, each L-shaped guide opposing the other as taught by Morimoto et al. for the purpose of guiding the brush holder.

8. Claims 46 is rejected under 35 U.S.C.103(a) as being unpatentable over Cousins et al. in view of Morimoto et al (U.S Patent No. 6,246,145).

Regarding claim 46, Cousins et al. show all limitations of the claimed invention except showing a motor mounting platform wherein a stop bar is mounted to the motor mounting platform between each pair of brush holder guides and proximate a hole which extends through the platform.

However, Morimoto et al. disclose a brush card wherein a stop bar (21 in Fig. 3) is mounted to the brush card between each pair of brush holder guides and proximate a hole which extends through the brush card for the purpose of preventing the brush holder from moving inward.

Since Cousins et al, and Morimoto et al. are in the same field of endeavor, the purpose disclosed by Morimoto et al. would have been recognized in the pertinent art of Cousins et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. by forming the platform wherein a stop bar is mounted to the motor mounting platform between each pair of brush holder guides and proximate a hole which extends through the platform as taught by Morimoto et al. for the purpose of preventing the brush holder from moving inward.

9. Claims 47,48,54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cousins et al. in view of Yamaguchi et al.

Regarding claim 47, Cousins et al. show all limitations of the claimed invention except showing a motor mounting platform wherein the brush holder has a top side including a first slot in communication with the opening and a second slot in communication with the opening and positioned perpendicular to the first slot.

However, Yamaguchi et al. disclose a brush card wherein the brush holder has a top side including a first slot in communication with the opening and a second slot in communication with the opening and positioned perpendicular to the first slot (Fig. 5); a bottom side opposite the top side for the purpose of simplifying a brush insert work.

Since Cousins et al. and Yamaguchi et al. are in the same field of endeavor, the purpose disclosed by Yamaguchi et al. would have been recognized in the pertinent art of Cousins et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. by forming the platform wherein the brush holder has a top side including a first slot in communication with the opening and a second slot in communication with the opening and positioned perpendicular to the first slot as taught by Yamaguchi et al. for the purpose of simplifying a brush insert work.

Regarding claim 48, Cousins et al. also show the motor mounting platform wherein: the first side and the second side of the brush holder are a first length; the first end and the second end of the brush holder are a second length; and the first length is longer than the second length (Fig. 3).

Regarding claim 54, Cousins et al. also show a motor mounting platform wherein the at least one motor support (the rim surrounds center hole in Fig. 3) and the brush holder guides (44) are integrally molded with the mounting platform.

Regarding claim 55, Cousins et al. also show the motor mounting platform wherein the at least one motor support contacts at least one brush holder guide (Fig. 3).

10. Claims 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cousins et al. in view of Yamaguchi et al. and further in view of Morimoto et al (US Patent No. 6,005,323).

Page 10

Regarding claim 49, Cousins et al. and Yamaguchi et al. show all limitations of the claimed invention except showing a motor mounting platform wherein: the top side of the brush holder has a first width; the bottom side or the brush holder has a second width; and the second width is greater than the first width.

However, Morimoto et al. disclose a brush card wherein the top side of the brush holder has a first width; the bottom side or the brush holder has a second width; and the second width is greater than the first width for the purpose of fixing the brush holder surely on the brush card (Fig. 2).

Since Cousins et al., Yamaguchi et al. and Morimoto et al. are in the same field of endeavor, the purpose disclosed by Morimoto et al. would have been recognized in the pertinent art of Cousins et al. and Yamaguchi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. and Yamaguchi et el. by forming the platform wherein the top side of the brush holder has a first width; the bottom side or the brush holder has a second width; and the second width is greater than the first width as taught by Morimoto et al. for the purpose of fixing the brush holder surely on the mounting platform.

Regarding claim 50, Morimoto et al. also show the brush card wherein the first and second sides of the brush holder each have a bottom edge adapted to be positioned within a pair of brush holder guides (10 in Fig. 2 and 6).

Regarding claim 51, Prior Art of Morimoto et al. also show the brush card wherein the bottom side includes a notch (20) capable of engaging a stop bar (Fig. 7).

11. Claims 52 and 53 are rejected under 35 U.S.C.103(a) as being unpatentable over Cousins et al. in view of Yamaguchi et al. and further in view of Ogino.

Regarding claim 52, Cousins et al. and Yamaguchi et al. show all limitations of the claimed invention except showing a motor mounting platform with a brush holder wherein a wire attached to the second end of the commutating brush; a spring contacting the second end of the commutating brush and encircling the wire; and a lead located in the second end of the brush holder, the lead contacting the wire and the spring.

However, Ogino discloses a brush assembly wherein a wire (43 in Fig. 1A) attached to the second end of the commutating brush (42); a spring contacting the second end of the commutating brush and encircling the wire; and a lead (44) located in the second end of the brush holder, the lead contacting the wire and the spring for the purpose of forming a brush assembly.

Since Cousins et al., Yamaguchi et al. and Ogino are in the same field of endeavor, the purpose disclosed by Ogino would have been recognized in the pertinent art of Cousins et al. and Yamaguchi et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Cousin et al. and Yamaguchi et el. by using a wire attached to the second end of the commutating brush; a spring contacting the second end of the commutating brush and encircling the wire; and a lead located in the second end of the brush holder, the lead contacting the wire and the spring as taught by Ogino for the purpose of forming a brush assembly.

Regarding claim 53, Ogino also shows the commutating brush is constructed of carbon.

## Response to Arguments

12. Applicant's arguments filed on 8/30/2004 have been fully considered but they are not persuasive. The applicant's argument is on the ground that "Cousins fails to disclose a motor mounting platform wherein the motor mounting platform is not in electrical contact with any current component when the motor is attached to the at least one support. In Cousins, the brush 50, which are current carrying component, are in electrical contact with the motor mounting platform 38 through springs 56 and 58". The Examiner respectfully disagrees with the Applicant. Webster's dictionary defines "contact" as " a union or junction in surface; connection or communication". Fig. 3 of Cousins shows the spring 58 are in physical contact with the motor mounting platform, however, the brushes 50 are not in electrical contact with the motor mounting form 38 because the motor mounting form is formed with non electrical conducting material (Col.5, lines 40-47). Therefore, there is no electrical connection or electrical communication between brushes 50 and platform 38.

Application/Control Number: 10/072,200 Page 13

Art Unit: 2834

In short, the claims are given the broadest reasonable interpretation, and they still do not clearly and distinctly claim the subject matter of the invention. Therefore, the rejection is still deemed proper

## Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### Information on How to Contact USPTO

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner 's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

**HNN** 

February 6, 2004

KARL TAMAI PRIMARY EXAMINER